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GRIFFITH, LAKE COUNTY INDIANA

AUGUST 15, 1988

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Agency for Toxic Substances and Disease Registry U.S. Public Health Service

Comments Period Ends:

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PRELIMINARY HEALTH ASSESSMENT AMERICAN CHEMICAL SERVICE, INCORPORATED LAKE COUNTY GRIFFITH, INDIANA August 15, 1988

Prepared by:
Office of Health Assessment
Agency for Toxic Substances and Disease Registry (ATSDR)

Background

The American Chemical Service, Incorporated (ACS) site is listed by the U.S. Environmental Protection Agency (EPA) on the National Priorities List (NPL). ACS began solvent recovery operations in May 1955. From 1955 until at least 1975, a variety of hazardous wastes were disposed of at various locations on the site. The exact size of the site is unclear; it includes the 19 acres of ACS property, a two-acre parcel of land which was sold to Kapica Drum, Inc. (now owned by Pazmey Corporation); and an inactive portion of the adjacent, 31-acre Griffith Sanitary Landfill.

The public has unrestricted access to these areas.

The following documents were provided to ATSDR for review: Trip Report, May 18, 1980; Preliminary Assessment, September 2, 1980; Site Investigation, September 9, 1980; Hazard Ranking System Package, May 17, 1983; and the Scope of Work for the Work Plan for the Remedial Investigation/Feasibility Study, April 1988. These documents form the basis of this preliminary health assessment.

Environmental Contamination and Physical Hazards

The environmental contamination on-site tentatively identified consists of benzene, toluene, vinyl chloride, pentachlorophenol, chloroethane, phthalates, heavy metals, cyanide, polychlorinated biphenyls, pesticides, maleic anhydride, methanol, and formaldehyde. This list of contaminants has been compiled from limited sampling of the groundwater, soil, and surface water, and from lists of chemicals known to have been disposed of there. Concentrations, and the respective environmental media, were not identified in the information supplied for review.

The environmental contamination off-site has not been investigated and documented yet.

There were no physical hazards reported for this site.

Potential Environmental and Exposure Pathways

AMERICAN CHEMICAL SERVICE, INC., GRIFFITH, INDIANA

The environmental pathways of concern are contaminated groundwater, soil, sediment, surface water, sediment, and airborne particulates and vapors.

The human exposure pathways of concern are ingestion and dermal contact with contaminated groundwater, ingestion and dermal contact with contaminated surface water, soil, and sediment, and inhalation of volatile organic compounds and airborne particulates.

Demographics

The closest residence is approximately 0.4 mile away. The size of the population within a three-mile radius is 10,000. There are 2,132 private wells in use in the vicinity of the site.

Evaluation and Discussion

There are no data upon which to gauge the impact of the site on public health. Data collected in the early 1980s (concentrations unavailable) indicated little impact at that time. A clay wall was installed normal to the perceived direction of groundwater flow in the early 1980s which appears to have controlled environmental degradation due to surface water and leachate runoff. However, there is some dispute over the actual direction of groundwater flow in this area.

ATSDR has prepared, or will prepare, Toxicological Profiles on the site contaminants (with the exception of maleic anhydride, methanol, and formaldehyde) noted above.

Conclusions and Recommendations

Based on the available information, this site is considered to be of potential public health concern because of the risk to human health caused by the possibility of exposure to hazardous substances via those environmental pathways identified above.

Further environmental characterization and sampling of the site and impacted off-site areas during the Remedial Investigation and Feasibility Study (RI/FS) should be designed to address the environmental and human exposure pathways discussed above. When additional information and data become available, e.g., the completed RI/FS, such material will form the basis for further assessment by ATSDR at a later date.